

ABSTRACT

BACKGROUND:

Intestinal anastomosis dates back to 1000 BC, the era of Sushruta. “The great Indian surgeon” he described the use of black ants during the suturing of intestinal anastomosis. Lembert then described his seromuscular suture technique in 1826 which became the mainstay of gastrointestinal anastomosis in the second half of the century. Currently the single layer extramucosal anastomosis is popular, advocated by Matheson of Aberdeen, as it probably causes the least tissue necrosis or luminal narrowing. The evaluation of mechanical sutures by means of stapler use has become a real technological advancement.

AIM OF THE STUDY:

1. To compare the handsewn anastomosis and stapler anastomosis techniques.
2. To compare the time duration of surgery, hospital stay, restoration of functions and postoperative morbidity.

MATERIALS AND METHODS

50 Patients admitted in our ward and emergency department of surgery, Coimbatore medical college hospital during the period of June – 2016 to July 2017 will be allocated into two groups according to the type of anastomosis, handsewn and stapler. The handsewn anastomosis done by double layer,

continuous suturing technique. Staplers used in anastomosis were linear cutting, linear non cutting, circular, curvilinear staplers. The parameters considered are time duration of surgery, hospital stay, post operative leak, restoration of gastrointestinal function, post operative morbidity. The anastomosis commonly done are gastro-jejunostomy anterior and posterior, jejunio-jejunostomy, ileo-colic, and colo-rectal anastomosis.

RESULTS

Regarding the total duration of the anastomosis time, it is shorter in stapler group when compared to handsewn group. with significant predictive value.

Appearance of bowel sounds and starting of oral feeds were earlier in stapler with significant predictive value.

Total duration of the hospital stay was less in stapler group when compare with handsewn group. with statistically significant predictive value.

Regarding complications stapler group had lesser complications when compared to hand sewn group.

CONCLUSION

Stapler anastomosis reduced the duration of surgery, early postoperative recovery of bowel functions, and reduced postoperative hospital stay, lesser anastomotic leak than the conventional handsewn anastomosis. As per our study, stapler anastomosis has better outcome than conventional handsewn anastomosis.